

REMARKS

Claims 25-46 were pending in this application prior to the outstanding Office Action. With this Amendment, claim 93 is added and claims 25, 36, 38-39 and 92 are cancelled.

The Problem of Hindsight

The Examiner's response to the problem of hindsight is a quick citation to *In re McLaughlin*, 443 F.2d 1392, 1395, 170 U.S.P.Q. (BNA) 209 (CCPA 1971), as excusing the use of hindsight on the basis that it is "in a sense" inevitable. The dictum in *McLaughlin* stands alone and has never been endorsed by the Federal Circuit, in its nearly 25 years. Reliance on this dictum should be viewed on appeal as an acknowledgement that improper hindsight has been applied.

The problem of hindsight is the most pervasive problem with obviousness analysis. Professors Lemley and others made this point in an *amicus* brief from which we have attached an excerpt. *Brief of Business and Law Professors as Amici Curiae in Support of the Respondents*, KSR Int'l v. Teleflex, Inc., S.Ct. docket 04-1350, pp. 21-24 (Oct. 16, 2006). The excerpt relies on and explains a pair of empirical studies by Gregory Mandel that demonstrate empirically why hindsight is not a problem that can be dismissed lightly. Mandel, Gregory N., "*Patently Non-Obvious: Empirical Demonstration that the Hindsight Bias Renders Patent Decisions Irrational*". Ohio State Law Journal, Vol. 67, p. 1391, 2006 Available at <http://ssrn.com/abstract=871684>; Mandel, Gregory N., "*Patently Non-Obvious II: Experimental Study on the Hindsight Issue Before the Supreme Court in KSR v. Teleflex*", 9 Yale Journal of Law and Technology 1 (2007). Available at <http://ssrn.com/abstract=928662>. We have attached the empirical work for the Examiner's consideration and study.

The Federal Circuit has cited *McLaughlin* four times without any approval of its hindsight dictum. Consider first the opinion in *McLaughlin*. The court, at 1314, explained just how the Cook reference indicated that the rail car shown therein was suitable for stacking of pallets and that the secondary references would have suggested use of filler panels and bulkheads in the Cook car, just as they were used in other rail cars, to prevent shifting of freight. In other words, reference to "hindsight" was dictum

and not controlling law in *McLaughlin* because the court reviewed the references and relied on support in the references for combining them.

In 1983, the Federal Circuit cited *McLaughlin* three times. It was listed among six CCPA cases, three of which reversed the Board and held an invention patentable and three of which affirmed the Board. *In re Sernaker*, 702 F.2d 989, 994, 217 U.S.P.Q. (BNA) 1 (Fed. Cir. 1983). The court specifically cautioned, at 994, that words of the six cases should not be read out of context. The *Sernaker* court reversed the Board, reasoning that it “pointed to no prior art that separately suggested expressly or by implication a three-element combination made up in” the way claimed. The prior art did not suggest keeping the print off the substrate in the manner claimed. *Id.*, at 994-995. Five months later, Chief Judge Markey penned a pair of opinions citing *McLaughlin*. *Medtronic v. Cardiac Pacemakers*, 721 F.2d 1563, 220 U.S.P.Q. (BNA) 97 (Fed. Cir. 1983); *Env'l Designs v. Union Oil Co.*, 713 F.2d 693, 218 U.S.P.Q. (BNA) 865 (Fed. Cir. 1983). To the contrary of approving hindsight, the Chief Judge cited *McLaughlin* for the proposition what the court must consider what the prior art as a whole would have suggested to one skilled in the art. *Medtronic*, 721 F.2d at 1582; *Env'l Designs*, 713 F.2d at 698. In *Medtronic*, he made it clear that the test under Section 103 was not what “one might contemplate”. In *Env'l Designs*, he affirmed the trial court’s determination that the invention as a whole was not obvious at the time it was made.

Five years later, Judge Nies wrote *In re Nilssen*, 851 F.2d 1401, 7 U.S.P.Q.2d (BNA) 1500 (Fed. Cir. 1983), in which cited *McLaughlin*, but did not approve of hindsight. Instead, he explained just why one would replace an element of the primary reference with an actuating element from the secondary reference. No new elements were added to the primary reference, but one was substituted.

Having reviewed every circuit court decision that cites *McLaughlin*, it is clear that the *McLaughlin* dictum stands alone without approval by the modern Federal Circuit.

Rejections under 35 U.S.C. §103(a) of Claims 25-46

The Examiner has rejected **claims 25-46** under 35 U.S.C. §103(a) as being unpatentable over Landvater (U.S. 6,609,101) in view of a furniture advertisement, Display Unlimited (www.displayunlimited.com).

Claim 25

Claim 25 has been cancelled and replaced with claim 93. Other claims now depend from 93 instead of 25.

The new claim 93 features display fixture setups, a term introduced on pages 9-10 of the application. Setup are defined as including display fixture types. Examples of fixture types given in the application, at 9-10, include tables, rounders, four walls, wall shelving, promotion tables, tills or display windows. Setups are named to distinguish among instances of similar setup, so that three identical fixtures might be named "front entrance tables – left", "front entrance tables – center" and "front entrance tables – right".

The new claim 93 describes the time elements as being used to collectively represent lead times. Lead times for items at selling locations are constructed by selecting a plurality of time elements. This is described at pages 6-7 of the application and elsewhere.

Because of similarities between the old claim 25 and the new claim 93, we respond to some of the Examiner's arguments.

The art cited by the Examiner to counter our earlier amendment of claim 25 was a furniture advertisement. Our position was that citation of a furniture advertisement as the most relevant prior art after at least three searches means that the case should be in condition for allowance. The Examiner acknowledged during our interview, in the prior office action (OA 4) and in this paper (FOA at 9) that Landvater does not suggest the claimed intermediate abstraction of named display types.

The Examiner now explains (FOA at 9-10) that Landvater's functionality is to keep a count of the number of products that would be displayed. The database used allows entry of a number of facings and a depth of stock behind each facing. Contrary to the Examiner's position, it does not associate products with a display; it only does the multiplication of number of facings time depth of facings to account for available space. The intermediate abstractions now present in claim 93, which facilitate naming display setup that could be used in different areas stores with different footprints, are not found in Landvater.

Applicants and the Examiner have looked at Landvater enough times in this case and similar cases to fully understand that the intermediate layers of abstraction present in claim 93 are not explicit or implicit in Landvater.

The Examiner now characterizes the secondary reference (FOA at 10) as a consulting service that aids a retailer in designing and arranging displays and fixtures. We can agree that layout of stores in retail environments (display design) involves placing display fixtures of various types in various locations. Having this agreement in mind, the secondary reference still teaches nothing about how to design an inventory program, a piece of software.

The Examiner argues that "the system of Landvater is capable of storing displays in memory", including the types of displays shown in the secondary reference ad. That simply is not what Landvater teaches about how the program works. From col. 14:

Data-

base **36** preferably stores the following shelf configuration information: the number of facings (product facing the consumer), the minimum number of rows deep required to create an attractive display, the maximum number of rows deep which will fit in the space allocated to this product, the amount of backroom safety stock (safety stock maintained in a location other than the store shelf), and the date this configuration becomes effective. For example, a product may have three facings, and should have a minimum of one row deep (or three products) to create an attractive display.

This passage does not teach storing a named display setup or associating items with a particular display. It only teaches storing and multiplying together the number of facings times the number of rows deep to yield a number that Landvater then treats as a safety stock and plugs into an equation. When the Examiner proposes to add additional abstraction layers to Landvater that are not present in the reference, she is inventing something more than Landvater discloses.

Still regarding claim 25, we extensively briefed our objection to the form of obviousness argument, that <one can walk into a store and see things there>, therefore, it would be obvious to <design software to represent what one can see> as not satisfying the case law, the MPEP or common sense. Our briefing, at 15-17, included discussion of the Examiner's resort to hindsight. The Examiner labeled this as arguments (5) and (6), even though it directly followed argument (1).

The Examiner posits a motivation to "more accurately calculate[e] the stock replenishments" by adding an abstraction layer to Landvater. (FOA at 13) Accordingly, "it would be important to incorporate such well known fixtures [into the program design] in order to ensure that planned replenishment order account for future changes in shelf configurations, and thus are accurate." (FOA at 13-14) This motivation does not stand up under scrutiny. Landvater did not hint that any inaccuracies would result, so there is no motivation to improve accuracy. Landvater considered facings times depth to account for inventory in a way that would allow presentation quantity to be treated as safety stock, so there would not be any improvement in accuracy. It is not plausible that one of skill in the art would look at the secondary reference, either as an ad for hard goods or consulting services, and reach the conclusion, without an inventive step, that the ad presented a way to improve the accuracy of Landvater's inventory accounting. The kind of creative inspiration and free association that would lead an inventory system analyst to look at Display Unlimited's ad and be inspired to add a layer of abstraction to the software is inventiveness.

As for hindsight, reciting the *McLaughlin* (OA at 15) dictum is more an admission of using hindsight than an answer to the many cases that we cited. Putting together old pieces that were known in the art in a new and useful way is essential to most inventions.

Inventions typically are new combinations of existing principles or features. *Env'tl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements."). The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the

invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result - often the very definition of invention.

Ruiz v. Chance, 357 F.3d 1270, 1275, 69 U.S.P.Q.2d (BNA) 1686 (Fed. Cir. 2004).

We hope that this discussion is helpful when the Examiner reviews new claim 93.

Claims 29-30, 32 and 34

We grouped these claims, because the same citations were repeatedly cut-and-pasted from one section of the office action to another. We explained that sets of time elements used to build lead times for items in stores, as refined in claims 29-30, 32 and 34, are missing from Landvater. In claims 29-30, 32 and 34, the time elements are refined to specify data collection, recommendation reviews, data processing, goods picking and shipping and other elements. The application, pages 4-5 and 7-8, consistent with the claims, describes time elements as separate times associated with parts of the supply cycle that are combined to model the cycle for a particular good at a particular store. Landvater does not include a method of combining time elements to build up a supply cycle.

The Examiner looks to Landvater for time elements. (FOA at 11) The Examiner says that "Landvater specifically teaches associating time elements in the time-phased planning system with a good at a plurality of selling locations" and refers to col. 9:15-25 & 55-67, col. 41:26-15:6. But, the cited passages do not read on the claims, as amended. There is no teaching to build a lead time for an item at a selling location from time elements as claimed.

Claims 27, 31, 33 and 35-36

Claims 27, 31, 33 and 35-36 should be allowable over Landvater for at least the same reasons as the claims from which they depend.

Claim 37

Claim 37 includes the limitation:

wherein the action includes allocating delivery of the item after ordering from a supplier

This detail of retail merchandising is not addressed by Landvater in any of the passages cited: 6:45-67; 8:25-45; 9:1-25 & 55-67; 13:30-45 & 59-67; or 14:25-65.

This application refers frequently to post-order placement allocation ("post allocation") of goods from a supplier. For instance, post allocation is defined on page 4 and further applied on page 6. Formulas that may be applied to allocation are presented and explained on pp. 19-20. None of the Landvater passages cited recognize or apply the concept of post allocation of goods already ordered. Teaching away from post allocation, Landvater takes a rigidly supply chain view of ordering and delivering exactly the projected need. For instance, at 9:3-5, "The sum of the projected replenishment shipments to retail stores 23 is used as input to replenishment system 200 at suppliers 24. The sum of the projected replenishment shipments to retail stores 23 represents what will be shipped out of suppliers 24." Instead of anticipating post-order allocation, Landvater teaches away from what we claim.

The Examiner counters that "'allocating delivery of the good after ordering from a supplier' [is different from] post-order placement allocation per se." (FOA at 12) We ask, what is the difference, other than the order of words in the phrase? If the Examiner were recasting post-order placement allocation in words beginning with a gerund, what words would she use?

It is not persuasive to say that Landvater discusses deliveries and timing. That is not enough to read on the claim language.

Therefore, claim 37 should be allowable.

Claims 38-40

Claims 38-40 should be allowable over Landvater for at least the same reasons as claim 25 from which they depend.

Claims 41-45

Claims 41-46 the limitations:

41. *The method of claim 93, further including selecting among a plurality of available approaches to calculating the presentation quantity, and selecting the presentation quantity used to be the average presentation quantity for the location during the predetermined selling period.*

42. *The method of claim 93, further including selecting among a plurality of available approaches to calculating the presentation quantity, and selecting the presentation quantity used to be the presentation quantity for the selling location on the first day of the predetermined selling period.*

43. *The method of claim 93, further including selecting among a plurality of available approaches to calculating the presentation quantity, and selecting the presentation quantity used to be the presentation quantity on the day of the predetermined selling period when the item is received at the selling location.*

44. *The method of claim 93, further including selecting among a plurality of available approaches to calculating the presentation quantity, and selecting the presentation quantity used to be the largest presentation quantity associated with the item at the selling location for any day of the predetermined selling period.*

45. *The method of claim 93, wherein the simulating includes selecting the larger of the presentation quantities or the projected demand requirements for the item at the selling locations.*

46. *The method of claim 93, wherein the presentation quantity used is the presentation quantity for the selling location on the last day of the predetermined selling period.*

Among these dependent claims, we think that claim 43 comes closest to the way that Landvater handles presentation quantities, except that it calls for selection among alternative approaches to calculating the presentation quantity, which is not suggested by Landvater. The Examiner previously cited the same passages, 8:25-45; 9:1-25 & 55-67; 10:1-20; 14:25-65; 15:1-6 & 17-25, as teaching all six different treatments of presentation quantity, without distinguishing among them. To us, Landvater teaches one approach to calculating presentation quantities, not six alternatives. Landvater Figures 14-15 illustrate the logic in replenishment system 200 for converting shelf configuration into safety stock level and for updating safety stock requirements. See, 14:59-15:25. Only one logic is suggested, without any alternatives.

The Examiner proposes (FOA at 12-13) to extrapolate from general discussions in Landvater that are scattered about the specification to a variety of ways in which presentation quantities might be calculated. After all, these dependent claims have great specificity. The only place where Landvater actually discusses the logic in replenishment system 200 for converting shelf configuration into safety stock level and for updating safety stock requirements is at col. 14:59-15:25. The other citations are unrelated to the claimed approaches to handling of presentation quantities. At least five of these six dependent claims are allowable over Landvater.

Therefore, claims 41-46 should be allowable over Landvater.

CONCLUSION

Applicants respectfully submit that this application is now in condition for allowance and solicit acceptance of the claims. If the Examiner believes a telephone conference would aid in the prosecution of this case in any way, applicants would welcome a telephonic interview.

The undersigned can ordinarily be reached at this office at (650) 712-0340 between 8:30 a.m. and 5:30 p.m. PST, Monday through Friday, or can be reached at his cell phone at (415) 902-6112 most other times.

Fee Authorization. The Commissioner is hereby authorized to charge any additional fee(s) determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (BLFR 1001-1).

Respectfully submitted,

Dated: 8 February 2007

/Ernest J. Beffel, Jr./

Ernest J. Beffel, Jr.

Registration No. 43,489

HAYNES BEFFEL & WOLFELD LLP
P.O. Box 366
Half Moon Bay, CA 94019
Telephone: (650) 712-0340
Facsimile: (650) 712-0263